DOCUMENT RESUME

ED 433 343 SP 039 741

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TITLE	Collaboration and Teachers' Perception of Professionality in Schools for Secondary Education.
PUB DATE	1999-04-23
NOTE	14p.; Paper presented at the Annual Meeting of the American Educational Research Association (Montreal, Quebec, Canada, April 19-23, 1999).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Departments; Foreign Countries; Secondary Education; Secondary School Teachers; *Teacher Attitudes; *Teacher Collaboration
IDENTIFIERS	Netherlands; *Professionalism; Subject Content Knowledge

ABSTRACT

This study examined forms of collaboration existing between Dutch secondary teachers within different departments, noting reasons for any differences. The paper begins by examining the literature on teacher collaboration, then describes the study. Researchers collected data from three secondary schools using interviews, observations, documents, and questionnaires. They interviewed four teachers in each of several departments, as well as each school leader. They observed staff meetings and analyzed meeting minutes. Other documents included school schedules, school ground plans, and information for teachers, students, and parents. Teachers completed a questionnaire on collaboration and perceptions of professionalism. Data analysis indicated that different forms and content of collaboration existed within and between schools. Simpler forms of collaboration were more common than complex forms. Most collaboration concerned subject matter, followed by testing. Teaching methods received the least attention. Teachers judged collaboration about teaching strategies as less useful. There were differences between formal and informal collaboration. Teachers found informal collaboration more satisfying and worthwhile. Most collaboration was between teachers in the same grade and track. The way teachers perceived characteristics of the subject was an important influence on collaboration. Teachers collaborated for several reasons, including efficiency, enhancing the sequencing of content within the department, enhancing the department's political status, and enhancing professional growth. There were differences in collaboration within departments. The most intensive collaboration occurred between teachers teaching lower secondary classes. (Contains 50 references.) (SM)

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Collaboration and teachers' perception of professionality in schools for secondary education.

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Paper presented at the annual AERA conference
Montreal April 1999

SP038741

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Collaboration and teachers' perception of professionality in schools for secondary education.

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Introduction

Departments are important settings for bonding among teachers in secondary schools. Teachers are naturally connected to each other by the subject they teach (Little, 1993; Reezigt, Den Boer & Harms, 1996; Goodson & Marsh). Departments are also components of the broader school community. Research has given attention to the school organization, but little is known about the way departments function within the school. This paper focuses on the results gathered in secondary schools based on the following research question: What forms of collaboration exist between teachers within departments in secondary education in the Netherlands and how can differences in collaboration between departments be accounted for?

In the first part of this paper I will discuss the way in which collaboration has been studied. Some explanations for differences in collaboration, suggested in earlier studies are mentioned. One of the explanations concerns the teachers' perception of professionality. I will elaborate on this concept in the second paragraph. How this study was conducted, is the topic in the third paragraph. I will end this paper with the main results and conclusions of my research.

Collaboration

Much of the research on teacher collaboration in the U.S. and England has been conducted in elementary or middle schools. In these studies it was found that different forms of collaboration contribute to the professional growth of teachers, implementing change, school development and student results (Purkey & Smith, 1983; Little, 1987; Rosenholtz, 1989; Louis & Miles, 1990; Smith & Scott, 1990; Fullan, 1991, 1992; Reynolds & Cuttance, 1992; Nias, Southworth & Campbell, 1992; Hargreaves, 1995). Much of this research has used the continuum of collegial relations as distinguished by Little (1990). She distinguished four different forms of collaboration. These forms vary from one another in the degree to which they induce mutual dependency. In my study I have elaborated on her continuum. I have studied five different forms of collaboration. I will discuss these forms and mention the possible contribution of each form to professional development and educational change.

Storytelling and scanning for ideas

This form of collaboration refers to teachers talking with each other. The topic of the conversation might be educational. By talking to each other teachers see that others have the same problems as they do. Besides that, they can get ideas from each other. If this form of collaboration does not go beyond "a litany of complaints" (Little, 1990, p. 514), its contribution to teachers' professional development and educational change is limited.

Sharing

This form of collaboration refers to the routine sharing of materials. Teachers exchange materials using their mailboxes. Whether or not the material is used, is seen as a responsibility of every teacher.

The contribution of sharing materials to teachers' professional development and educational change depends on what teachers do with the received material.

Making agreements

This form of collaboration refers to teachers making agreements with each other about educational topics, e.g the chapters which will be covered, the way in which students will be tested etc. Teachers' activities can be restricted to a certain degree by the agreements made.

The contribution of making agreements to teachers' professional development and educational change can be positive and negative as well. Positive in the sense that it contributes to mutual responsibility. Negative in the sense that it can diminish exploring new ways of teaching. Several researchers note the importance of finding a careful balance between collaboration and autonomy (Louis & Smith, 1990; Staessens, 1991; Clement, Staessens & Vandenberghe, 1993; Fullan, 1993; Hoyle & John, 1995).

Aid and Assistance

This form of collaboration refers to teachers helping one another and giving advice. Mostly this will happen only if teachers ask for it. "The principal limitation is that questions asked by one teacher of another are interpreted as request for help.... It may jeopardize self-esteem and professional standing" (Little, 1990, p. 516).

The contribution of aid and assistance to teachers' professional development and educational change depends on the content. Help might aid professional growth in the sense of 'single loop' learning. Single loop learning refers to learning within a given context. Single loop learning is learning in which teaching practices are refined.

Teachers become influenced by getting help from experienced teachers. If helping concerns learning to improve existing practices, it will not contribute to educational change. If helping concerns looking for new practices and is based on principles of 'double loop' learning, it might contribute to educational change. Double loop learning is learning in which new and other practices are learned.

Joint work

This form of collaboration is reserved by Little (1990, p. 519) for "encounters among teachers that rest on shared responsibility for the work of teaching (interdependence), collective conceptions of autonomy, support for teachers'initiative and leadership with regard to professional practice, and group affiliations grounded in professional work".

This form of collaboration refers to teachers developing materials and lessons with each other, co-teaching classes and visiting each others' classrooms. If they visit classrooms they also give feedback to each other. This form of collaboration is often mentioned as peercoaching (Showers & Joyce, 1996).

Joint work is the most compelling one for teachers' professional development and implementing educational change. This is especially so if teachers frequently discuss and criticize the teaching method used. Again double loop learning is important.

Furthermore in my study a distinction was made between formal and informal collaboration, and different content of collaboration, e.g. the subject matter, testing and teaching methods.

There is not much known about collaboration in high schools. In Dutch research attention has been given to the ways in which departments of Dutch, English, Mathematics, Geography, History, Art and Physical education co-ordinate their work. Other departments have not been studied, nor has there been any emphasis on true collaboration. The concept of co-ordination resembles two forms of collaboration that I have studied; storytelling and scanning for ideas and making agreements. The results of these studies show that there are differences in co-ordination between departments. Some departments have been the subject of study in both the U.S. and the Netherlands. These studies show opposite results and explanations for differences between departments. Possibly the national and cultural context influences co-ordination between departments (Paine & Ma, 1994). The following explanations have been given for differences between departments:

Characteristics of the subject

In earlier studies it was suggested that the characteristics of the subject which is taught, influenced the amount and form of two forms of collaboration, namely talking and making agreements (Witziers & Van Vilsteren, 1990; Stodolsky & Grossman, 1992, 1995; Witziers, 1992; Stodolsky, 1993, 1995; Friebel, 1994; Grossman & Stodolsky, 1995). The knowledge base of the subject taught, influences the amount and form of collaboration. If there is consensus about the content of the subject, less standardization about the content within departments exists. If there is less consensus about the content it seems that teachers talk more about the content and make more agreements about what should be taught.

If we look at the results of studies about collaboration in which the knowledge base of the subject is taken into account (Witziers & Van Vilsteren, 1990; De Brabander, 1992; Stodolsky, 1993, 1995; Talbert & McLaughlin 1994, Talbert, 1995), it seems that there is more consensus about the content within departments based on academic knowledge (Little & Threat, 1994). The results of earlier studies, both in The Netherlands and the U.S., show that this is especially so for Mathematics (Witziers & Van Vilsteren, 1990; De Brabander, 1992; Grossman & Stodolsky, 1994; Stodolsky, 1993; Talbert & Perry, 1994; Talbert, 1995).

Subculture of the department

Siskin (1991, 1994) has committed an explorative study about collaboration in departments from a cultural point of view. The results of her study indicate the importance of a shared vision and social relations between teachers within the department. In the Mathematics department, in which there is a clear view of the content of the subject taught, students all get the same treatment. In the English

department, in which the content of the subject taught isn't clearly defined, students get a different treatment. The way in which Siskin has defined the shared vision is the same as the characteristics of the subject taught, mentioned above. Siskin's study, however, shows that the academic status is not the single explanation for the way in which the subject content is perceived. The cultural setting of the school influences this perception. In her study she also mentions the social relations between teachers as an explanation for collaboration.

Perception of professionality.

Some researchers have used Hoyle's (1975) distinction between restricted and extended professionality. Hoyle (1975, p. 315) refers to professionality as "the knowledge, skills and procedures employed by teachers in process of teaching." His distinction shows different components which have been used in Dutch research. Schuit (1993) concluded that teachers with an extended professionality were interested in exercising influence outside the classroom. Witziers (1992) concluded that teachers with an extended professionality collaborated more by making agreements than teachers with a restricted professionality. In both studies the perception of professionality was associated with different perspectives on autonomy.

Not all the components of Hoyle's distinction were defined in these studies. His distinction is seen as an important explanation for collaboration. It is also suggested by different authors (e.g. Liebermann & Miller, 1984, 1990; Rosenholtz, 1989) to be an important explanation for teachers' professional development. Little empirical evidence is found for this suggested relation between professionality and collaboration or professional development. That is the reason for defining the components of professionality in my study. In the next paragraph I will discuss these components.

Teachers' perception of professionality

In literature about studies of organization of schools, a distinction is made between an educational and a organizational system. The educational system is where the teaching-learning process takes place. The organizational system is the administrative domain where policy-making processes take place.

Both the educational and the organizational system can be found in Hoyle's (1975) concept of restricted and extended professionality. If we look closely at his distinction, different components can be recognized. Some of these components can be placed in the organizational and some in the educational system (see figure 1).

In literature about teaching as a profession, different features of professionalism are mentioned[1]*. Two*

[1] A lot of debate is going on about whether the occupation of teaching is a profession or not. Professionalism refers to "those strategies and rethorics of an occupation employed by members in seeking to improve status, salary and conditions" (Hoyle, 1975, p. 315). The main focus of professionalism is a sociological project (Englund, 1996) and as such it does not say anything about the teaching process itself. Therefore I will

characteristics of a profession are mentioned by different authors (Etzioni, 1964; OECD, 1974; Freidson, 1986; Doyle, 1990; Van Delden, 1990). One characteristic is knowledge. A profession has a profound body of knowledge, based on academic knowledge. The other characteristic is autonomy. A profession distinguishes itself from an occupation by professionals having a great amount of freedom to decide which work will be committed in which way.

We can recognize these two characteristics of a profession in the distinction Hoyle has made between the two forms of professionality (see figure 1). Furthermore two characteristics in the organizational system refer to the focus teachers have towards commitment with non-teaching matters.

	restricted professionality	***extended professionality***
Educational system		
Autonomy	*- value placed on autonomy*	*- value placed on professional collaboration*
Knowledge	*- skills derived form experience*	*- skills derived form a mediation between experience and theory*
	- introspective with regard to method	*- methods compared with those of colleagues and with reports of practice*
	- involvement in in-service work limited and confined to practical courses	*involvement in in-service work considerable and includes courses of a theoretical nature*
	- infrequent reading of professional literature	*- regular reading of professional literature*
Organizational system		
Autonomy	*-classroom events perceived in isolation*	*- classroom events perceived in relation to school policies and goals*
Focus	*- perspective limited to the immediate in time and place*	*- perspective embracing the broader social context of education*
	- limited involvement in non-teaching professional activities	*- high involvement in non-teaching professional activities (especially teachers'centres, subject associations, research)*

Figure 1. Two forms of professionality (elaboration of Hoyle, 1975)

In my study I have used a questionnaire in which autonomy and knowledge have been defined. Questions of the knowledge resemble characteristics of the subject, namely the degree of consensus about the content of the subject taught. I have asked teachers for their perception of the knowledge base of the subject they teach. Within the knowledge base I have distinguished the same contents as mentioned in collaboration, namely subject matter, testing and teaching methods.

Autonomy of the teacher can be placed both in the educational and in the organizational system. This component has been defined as the willingness to collaborate with teachers who teach the same subject

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not discuss this debate in this paper.

(as autonomy in the educational system) and the willingness to collaborate with teachers from another department and the schoolleader (as autonomy in the organizational system).

Methods

The study of literature revealed that little is known about collaboration between teachers in departments in secondary education. Because of the limited knowledge about collaboration between teachers in their departments, an exploratory research design consisting of multi-site case studies in three comprehensive secondary schools was chosen (Yin, 1994). Data collected in each site included interviews, observations, documents, and questionnaires. The case studies consisted of four departments in two schools, and three departments in one school. Four teachers were interviewed in each department, as well as the school leader. In most of the departments an observation of a staff meeting was conducted and the minutes of the departmental staff meetings held in the year of this research analyzed. This was done to collect qualitative data about the formal collaboration. Other documents, like the school schedule, a ground plan of the school, and information for teachers, students and parents were also analyzed. This was done to collect qualitative data about collaboration and possible factors influencing collaboration[2].

The qualitative data was analyzed by coding segments of texts and using matrices (Miles & Huberman, 1994). Data from different qualitative resources was strongly reduced. Data which was delivered by less than two sources, was omitted in the matrices. The reliability of the codes, measured by Cohen's Kappa (1969), was acceptable (above K=.60).

In addition, all the teachers working at the schools were asked to fill out a questionnaire about collaboration and about perceptions of professionality. A total of 202 questionnaires were returned by teachers and used in the analysis. The alpha coefficients of the scales used in the questionnaires showed that all scales (in total 34), except two, were reliable (above α=.70). The scales were also confirmed by factor analyses. The two scales that were not reliable were excluded from analysis. The qualitative and quantitative data concerning collaboration where combined by using matrices. The quantitative data did not fit the commands to a multi-level analysis. Therefore, relations between collaboration and teachers' perception of professionality were analyzed by regression analyses.

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[2] In this paper I will not discuss factors influencing collaboration (For further information see Van Wessum, 1997).

Results and conclusions

The analysis showed that different forms and contents of collaboration exist within and between secondary schools. Simpler forms of collaboration (like storytelling and scanning for ideas and making agreements) were found more often in schools than more complex forms of collaboration (like aid and assistance and joint work).

Concerning the content, most collaboration concerned the subject matter, followed by testing. Teaching methods received the least attention, both within formal and informal collaboration. Teaching strategies were experienced as belonging to the characteristics of an individual teacher and the situation in the classroom. Therefore teachers judged collaboration concerning teaching strategies as less useful (Fullan, 1991, 1993). There were some differences between formal and informal collaboration. Formal collaboration occurred around topics that are not related directly to teaching, such as scheduling and buying course materials. Informal collaboration concerned topics related to teaching. Because of this difference between formal and informal collaboration, teachers mentioned that they found informal collaboration more satisfactory and worthwhile than formal collaboration. Most collaboration was restricted to teachers who taught the same year and track, and was directly aimed at immediate use in the classroom. Informal collaboration provided this need, while formal collaboration was seen as a burden.

In this study the explanation for differences in collaboration between teachers in their departments was studied by looking at the relationship between teachers' perceptions of professionality and the forms of collaboration. The way teachers perceive characteristics of the subject constituted one important influence on collaboration. If teachers perceived their subject knowledge as uncertain (an evolving subject knowledge), they were more likely to collaborate than when they had a clearly defined and static view of the subject knowledge they taught. This confirmed previous findings, but in earlier research the characteristics of subject knowledge were seen as characteristics of the subject knowledge itself. This research showed that this is not the case. Teachers who teach the same subject can have different ideas about its characteristics. Their perception, rather than the subject itself, influenced collaboration. The other component of the teachers' perceptions of professionality concerned the willingness of teachers to share their autonomy. The way teachers perceived their autonomy, did not influence collaboration between teachers.

The interview data revealed other explanations for differences in collaboration. The reasons for teachers to collaborate can differ. One of the reasons, as mentioned above, was that teachers wanted to collaborate if it contributed to the teaching process. Apart from this motive, teachers collaborated because of the following reasons:

(1) Efficiency. Teachers decided to collaborate if it saved time;

(2) To enhance the sequencing of content within the department both from an organizational point of view as a pedagogical point of view. To make sure that all students learn the same topics within a school year, teachers co-ordinated the contents and the testing of their lessons;

(3) To enhance the political status of the department. Teachers who taught subjects which have low status, like Physical education, collaborated in order to manifest themselves as a departmental unit which had to be taken seriously by the school leader;

(4) To enhance the professional growth and supply socio-emotional support of the teacher. Through collaboration teachers could learn from each other and grow professionally.

The fact that teachers collaborated for different reasons, explained why collaboration failed to show a cumulative pattern (more complex forms of collaboration suggest the existence of simpler forms of collaboration), as suggested by Little (1990). The motives for starting a collaborative relationship can differ between the different forms of collaboration.

There were also differences in collaboration within departments. The most intensive collaboration occurred between teachers who taught lower secondary classes. During the research period teachers started with the implementation of a major national reform for lower secondary education. This educational change is concerned with creating equal opportunities for students, delaying the choices for a further (educational) career and enhancing the quality of teaching students (Karstanje, 1996), and is similar to the "middle school" model in the U.S. It is worth mentioning that teachers saw this focus of collaboration as temporary in order to develop course materials which they needed to work according to the demands of the reform. Once these materials were developed, collaboration was judged as not needed anymore. There are also possible structural reasons that are unique to the Dutch school system. Collaboration concerned with "vertical issues" (sequencing of curriculum or pedagogy throughout the secondary years) within departments did not exist. Long term educational planning was not found in any department (cf. Friebel, 1994). Teachers mentioned that using instructional materials developed to meet national standards made vertical co-ordination unnecessary.

Concluding comment

The findings of this study suggest that subject matter departments do not provide strong organizational settings to support collaboration among teachers. Because the department cannot be seen as a unit, this can be a problem for implementing educational changes which demand changes in the teaching process as a whole. These changes were demanded from schools in order to implement governmental reforms aimed at introducing more flexibility and constructivist teaching models into the secondary school. The teaching process itself was also not a main topic in the informal collaboration. If teachers shared an interest in the teaching process, attention was given to improvement. The focus was never on changing or developing the teaching process. At it's best teachers were capable of single loop learning, but never of double loop learning. Double loop learning is demanded for implementing educational change and for teachers professional growth. If collaboration will contribute to both teachers' professional development and implementing educational change, it is important that it is based on the principles of double loop learning. Because this is very demanding, teachers can seek for help outside the school. Showers and Joyce (1996) showed that seeking outside help can contribute to double loop learning if peer coaching is set within a staff development project.

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